



Atty. Dkt. No. 023971-0392

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Previously Presented) A stator for use in a two rotor single stator type electric motor in which inner and outer rotors are adapted to rotate independently with respect to each other within and around an axis of the stator upon application of electric power to the stator, the stator comprising:

a stator core including a plurality of stator teeth that are circumferentially arranged around a common axis, each stator tooth including a plurality of flat magnetic steel plates that are aligned along the common axis while contacting one another; and

at least one connecting ring plate coaxially installed in the stator core in such a manner that the ring plate is put between adjacent two of the flat magnetic steel plates of each stator tooth, the ring plate being of an endless annular member and having a thickness that is smaller than an axial length of the stator;

two bracket members between which the stator core, having therein the connecting ring plate, is sandwiched; and

connecting members to fasten the sandwiched stator core within the two bracket members.

2. (Original) A stator as claimed in Claim 1, in which the connecting ring plate comprises:

an annular inner base portion; and

a plurality of finger portions that radially extend outward from the annular inner base portion.

3. (Previously Presented) A stator for use in a two rotor single stator type electric motor in which inner and outer rotors are rotated independently with respect to each other within and around the stator upon application of current to the stator, the stator comprising:

a stator core including a plurality of stator teeth that are independent with respect to one another and circumferentially arranged around a common axis, each stator tooth

including a plurality of flat magnetic steel plates that are aligned along the common axis while contacting one another; and

at least one connecting ring plate coaxially installed in the stator core in such a manner that the ring plate is put between adjacent two of the flat magnetic steel plates of each stator tooth while contacting both of the flat magnetic steel plates, the ring plate being of an endless annular member, wherein the connecting ring plate includes:

an annular outer base portion; and

a plurality of finger portions that radially extend inward from the annular outer base portion.

4. (Original) A stator as claimed in Claim 1, in which the connecting ring plate is constructed of a magnetic steel plate.

5. (Original) A stator as claimed in Claim 1, in which the connecting ring plate is constructed of a non-magnetic metal.

6. (Original) A stator as claimed in Claim 1, in which each stator tooth has a rectangular cross section.

7. (Original) A stator as claimed in Claim 6, in which the rectangular cross section is tapered at its leading end.

8. (Original) A stator as claimed in Claim 1, in which each stator tooth is equipped at a radially leading end thereof with an auxiliary stator member that is constructed of a magnetic steel.

9. (Original) A stator as claimed in Claim 8, in which the auxiliary stator member of one stator tooth and the auxiliary stator member of an adjacent stator tooth are separated by a non-magnetic metal member that is arranged between the two stator teeth.

10. (Previously Presented) A stator for use in a two rotor single stator type electric motor in which inner and outer rotors are rotated independently with respect to each other within and around the stator upon application of a compound electric current to the stator, the stator comprising:

a stator core including a plurality of stator teeth that are circumferentially arranged around a common axis, each stator tooth including a plurality of flat magnetic steel plates that are aligned along the common axis while contacting one another;

at least one connecting ring plate coaxially installed in the stator core in such a manner that the ring plate is put between adjacent two of the flat magnetic steel plates of each stator tooth, the ring plate being of an endless annular member and having a thickness that is smaller than an axial length of the stator;

a plurality of coils put around the stator teeth respectively;

two supporting brackets between which the stator teeth of the stator core, having therein the connecting ring plate, are sandwiched;

fastening members that fasten the two supporting brackets to tightly connect the magnetic steel plates of each stator tooth to one another, thereby fastening the sandwiched stator core within the two brackets; and

a molded plastic that embeds therein the stator core, the connecting ring plate, the coils, the two supporting brackets and the fastening members thereby to constitute a cylindrical structure.

11. (Previously Presented) A stator for use in a two rotor single stator type electric motor in which inner and outer rotors are rotated independently with respect to each other within and around the stator upon application of current to the stator, the stator comprising:

a stator core including a plurality of stator teeth that are independent with respect to one another and circumferentially arranged around a common axis, each stator tooth

including a plurality of flat magnetic steel plates that are aligned along the common axis while contacting one another; and

at least one connecting ring plate coaxially installed in the stator core in such a manner that the ring plate is put between adjacent two of the flat magnetic steel plates of each stator tooth while contacting both of the flat magnetic steel plates, the ring plate being of an endless annular member and having a thickness that is smaller than an axial length of the stator;

two bracket members between which the stator core, having therein the connecting ring plate, is sandwiched; and

connecting members to fasten the sandwiched stator core within the two bracket members; wherein

the at least one connecting ring plate is adapted to suppress deformation or inclination of the stator teeth, when a torque is applied to the stator, by contacting both of the flat magnetic steel plates.

12. (Currently Amended) The stator of claim 1, further including at least two connecting ring plates, wherein at least some of the flat magnetic steel plates are held between the two connecting ring plates only by compression forces acting through the two connecting ring plates.

13. (Currently Amended) The stator of claim 10, further including at least two connecting ring plates, wherein at least some of the flat magnetic steel plates are held between the two connecting ring plates only by compression forces acting through the two connecting ring plates.

14. (Currently Amended) The stator of claim 11, further including at least two connecting ring plates, wherein at least some of the flat magnetic steel plates are held between

the two connecting ring plates only by compression forces acting through the two connecting ring plates.

15. (Previously Presented) The stator of claim 1, wherein the plurality of stator teeth of the stator core are independent with respect to one another, and wherein the at least one connecting ring plate coaxially installed in the stator core is installed in such a manner that the ring plate is put between adjacent two of the flat magnetic steel plates of each stator tooth while contacting both of the flat magnetic steel plates.

16. (Previously Presented) The stator of claim 10, wherein the plurality of stator teeth of the stator core are independent with respect to one another, and wherein the at least one connecting ring plate coaxially installed in the stator core is installed in such a manner that the ring plate is put between adjacent two of the flat magnetic steel plates of each stator tooth while contacting both of the flat magnetic steel plates.

17. (New) The stator of claim 1, wherein the stator does not include a yoke between the stator core and the outer rotor.

18. (New) The stator of claim 3, wherein the stator does not include a yoke between the stator core and the outer rotor.

19. (New) The stator of claim 10, wherein the stator does not include a yoke between the stator core and the outer rotor.

20. (New) The stator of claim 11, wherein the stator does not include a yoke between the stator core and the outer rotor.

21. (New) A vehicle drive system, comprising:

a planetary gear unit including a first sun gear and a second sun gear; and

the stator of claim 1, wherein the inner rotor is rotationally linked to the first sun gear, and the outer rotor is rotationally linked to the second sun gear.

22. (New) A vehicle drive system, comprising:

a planetary gear unit including a first sun gear and a second sun gear; and

the stator of claim 3, wherein the inner rotor is rotationally linked to the first sun gear, and the outer rotor is rotationally linked to the second sun gear.

23. (New) A vehicle drive system, comprising:

a planetary gear unit including a first sun gear and a second sun gear; and

the stator of claim 10, wherein the inner rotor is rotationally linked to the first sun gear, and the outer rotor is rotationally linked to the second sun gear.

24. (New) A vehicle drive system, comprising:

a planetary gear unit including a first sun gear and a second sun gear; and

the stator of claim 11, wherein the inner rotor is rotationally linked to the first sun gear, and the outer rotor is rotationally linked to the second sun gear.